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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,338	03/15/2004	Wataru Koide	04178/LH	1937

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EXAMINER	
REDDING, THOMAS M	

ART UNIT	PAPER NUMBER
2624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/801,338	KOIDE ET AL.	
	Examiner	Art Unit	
	Thomas M. Redding	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/15/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections - 37 CFR 1.75(d)(1)

Claim Objections - 37 CFR 1.75(a)

1. The following is a quotation of 37 CFR 1.75(a):

> The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

2. Claims 3 and 4 are objected to under 37 CFR 1.75(a), as failing to particularly point out and distinctly claim the subject matter which application regards as his invention or discovery.

Claim 3 refers to "shutter type covers". The word "type" renders the claim indefinite. "The addition of the word "type" to an otherwise definite expression (e.g., Friedel-Crafts catalyst) extends the scope of the expression so as to render it indefinite" (MPEP § 2173.05(b) (E). Ex parte Copenhaver, 109 USPQ 118 (Bd. App. 1955)).

Claim 4 uses the phrase "stretchy like a bellows". MPEP §2173.05(d) directs that exemplary claim language ("for example," "such as") is not appropriate in claims.

> Description of examples or preferences is properly set forth in the specification rather than the claims. If stated in the claims, examples and preferences >may< lead to confusion over the intended scope of a claim (MPEP §2173.05(d)) .

3. The following is a quotation of 37 CFR 1.75(d)(1):

> The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

4. Claim 12 is objected to under 37 CFR 1.75(d)(1), as failing to conform to the invention as set forth in the remainder of the specification. Claim 12 refers to "a fingerprint sensor moving mechanism". This seems to describe a mechanism for physically moving the sensor. There is neither any written description in the specification or structure shown in any of the drawings to support this type of functionality. This may well be a typographical error. Correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 8 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Minkin et al (US 6,668,071 B1).

Regarding claims 1 and 12, Minkin working in the same field of endeavor of securing terminal devices with fingerprint sensors teaches [a]n information terminal apparatus having a collation function ("this invention relates to the optical scanning of fingerprints (dactyloscopical systems) for personal identification as required in such areas as computer technology",Minkin, column 1, line 9), comprising:

an information input unit which has a detection surface exposed outside the apparatus (Minkin Figure 2), reads a fingerprint that touches the detection surface ("the video camera accumulates the image of a fingerprint in a picture formation mode", Minkin column 4, line 39), and generates fingerprint data ("the present invention allows for high-quality pictures of fingerprints" Minkin, column 6, line 23);

a control unit which collates fingerprint data input from the information input unit and permits operation of the apparatus ("Well-known dactyloscopical identification software systems are pre-installed in processing module 8. (15) Furthermore, additional well-known programs can be installed in processing module 8 to prevent unauthorized access to the computer" Minkin, column 8, line 15, also Figure 2);

a protection unit which can move to a position where the detection surface of the information input unit is covered and a position where the detection surface is exposed ("In the embodiment of FIGS. 5A and 5B, cover 9 is a connected to the photosensitive unit 3 by a slidable connection" Minkin, column 8, line 49) ; and a moving mechanism

which biases the protection unit to a covering position of the information input-unit ("After the finger has been read, the user withdraws his finger, and the biasing unit 93, which may be a spring or spring-type latch, pushes the cover back to block access to the entry surface.".Minkin, column 8, line 55)

Regarding claim 8, Minkin teaches all the elements in common with claim 1. Minkin also teaches a protection unit which has a film closely facing the detection surface ("In the embodiment of FIGS. 5A and 5B, cover 9 is a connected to the photosensitive unit 3 by a slidable connection" Minkin, column 8, line 49, Minkin's cover may be thin). Minkin's covering can provide a state in which fingerprint collation is performed on the detection surface when the protection unit moves to an exposure position (as described for claim 1) and a state in which handwriting input is performed on the film when the protection unit is located at the covering position are switched (One could lay a piece of paper over Minkins cover when closed and successfully write upon it, particularly if it provides a smooth surface).
("While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997)" MPEP §2114).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minkin et al. (US 6,668,071 B1) in combination with Sorenson (6,065076).

Regarding claims 2,3 and 5, Minkin teaches all the elements of claim 1 as given above. Minkin also teaches a protection unit that is compactly stored at a storage position, covers the detection surface when the protection unit is extended, and exposes the detection surface when the protection unit is contracted.

Regarding claim 2, Minkin does not specifically describe [a] protection unit is formed by coupling a chain, and is flexible.

Sorenson, working in a similar problem solving area of protecting an input sensor does teach a roll-top protective cover that is formed by coupling a chain, is flexible, is compactly stored at a storage position, covers the detection surface when the protection unit is extended, and exposes the detection surface when the protection unit is contracted ("Advantageously, communication tablet 1 includes a roll-top display protective cover 2 which covers and protects an input-capable display (not shown) when the communication tablet 1 is not in use.", Sorenson, column 3, line 19). The elements of a roll top cover do link together like a chain.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to combine the fingerprint analysis system of Minkin with the protective roll-top cover of Sorenson to devise a cover system that makes more efficient use of the top surface working space. A simple one-piece slide panel requires at least an equal area for storage when in the open position that seriously limits the placement other display or control elements in that same space. A roll-top cover can route around corners and be stowed in the bottom of the case allowing more efficient use of the top working area (Figure 2 of Sorenson, note where the roll-top cover allows the input and display element to fill almost the entire front or top surface of the device).

Regarding claim 3, the Minkin-Sorenson combination above does describe [a] protection unit [that] is formed by coupling a plurality of shutter type covers, is flexible, is compactly stored at a storage position, covers the detection surface when the protection unit is extended, and exposes the detection surface when the protection unit is contracted (figure 1 and 3 of Sorenson, the roll-top cover is made of connected sliding segments that effectively shutter the display opening, Note: the word shutter is defined as "a movable cover, slide, etc., for an opening", *Dictionary.com Unabridged (v 1.1).* Random House, Inc. 07 Jun. 2007.).

Regarding claim 5, the Minkin-Sorenson combination above describes [a] protection unit [that] is formed by coupling a plurality of slide type covers, is stretchy, is compactly stored at a storage position, covers the detection surface when the protection unit is extended, and exposes the detection surface when the protection unit is

contracted (figures 1 and 3 of Sorenson, the roll-top cover is made up of connected sliding segments).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minkin et al. (US 6,668,071 B1) in combination with Yamashiro (US 2003/0109214 A1).

Regarding claim 4, Minkin teaches [a] protection unit [that] is compactly stored at a storage position, covers the detection surface when the protection unit is extended, and exposes the detection surface when the protection unit is contracted.

Minkin does not teach a protection unit that is stretchy like a bellows.

Yamashiro, working in a similar problem solving area of shielding an opening does teach a protection unit that is stretchy like a bellows (Yamashiro, figures 4, 5 and 6 reference number 17).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to combine the fingerprint analysis system of Minkin with the pleated shade cover of Yamashiro to devise a cover system that makes more efficient use of the top surface working space. A simple one-piece slide panel requires at least an equal area for storage when in the open position that seriously limits the placement other display or control elements in that same space. A pleated shade (bellows-like) cover allows compact storage of a cover when it is in the open position (Yamashiro figures 3 and 6).

5. Claim 6, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minkin et al. (US 6,668,071 B1) in combination with Miyashita et al. (US 2003/0044090 A1).

Regarding claim 6, Minkin teaches An apparatus according to claim I, but does not teach an apparatus which further comprises a movement detection unit which detects that the protection unit has been moved to the covering position and an exposure position of the information input unit, and in which the control unit activates the information terminal apparatus on the basis of a detection signal from the movement detection unit.

Miyashita, working in the same field of endeavor of securing terminal devices with fingerprint sensors, does teach a movement detection unit which detects that the protection unit has been moved to the covering position and an exposure position of the information input unit, and in which the control unit activates the information terminal apparatus on the basis of a detection signal from the movement detection unit (Figures 4-8 and "a detection means for detecting whether or not the sensor cover is open or closed; a first control means that operates in accordance with the result detected by the detection means and turns on power supply to the fingerprint sensor when the sensor cover is in an open condition and turns off power supply to the fingerprint sensor when the sensor cover is in a closed condition", paragraph 15, line 2).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to combine the fingerprint analysis system of Minkin with the cover switch

apparatus of Miyashita for the purpose of "avoiding wasteful power consumption" (Miyashita, paragraph 16, line 6).

Regarding claim 10, the elements common to claims 1 and 6 are taught in the combination above. The combination also discloses a control unit which activates the apparatus on the basis of a detection signal from the movement detection unit ("turns on power supply to the fingerprint sensor when the sensor cover is in an open condition", Miyashita, paragraph 15, line 5)

wherein control in use is inhibited and interrupted to enable another control in synchronism with movement of the protection unit ("To register fingerprints the device holder must first open sensor cover 6. At that point, control part 3 recognizes that sensor cover 6 has entered an open condition so in addition to turning power supply to fingerprint sensor 7 from off to on, control part 3 commences counting time elapsing. Next...", Miyashita, paragraph 44, Opening the cover triggers software in support of the fingerprint reader to begin operation)

Regarding claim 11, the Minkin-Miyashita combination teaches the elements that are in common with claim 1 above, a movement detection unit which detects that the protection unit has been moved to the covering position and an exposure position of the information input unit ("a detection means for detecting whether or not the sensor cover is open or closed; a first control means that operates in accordance with the result detected by the detection means and turns on power supply to the fingerprint sensor when the sensor cover is in an open condition and turns off power supply to the fingerprint sensor when the sensor cover is in a closed condition", Miyashita, paragraph 15, line 2); a control unit which activates the apparatus on the basis of a detection signal from the movement detection unit ("turns on power supply to the fingerprint sensor when the sensor cover is in an open condition", Miyashita, paragraph 15, line 5); and a stop unit which stops the apparatus,

wherein the activated apparatus is stopped by the stop unit on the basis of the detection signal ("Once sensor cover 6 is closed power supply to fingerprint sensor 7 is turned off,", Miyashita, paragraph 46 line).

6. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minkin et al. (US 6,668,071 B1) in combination with Lu (US 2002/0094201 A1) and Muroi et al.(6,033,130).

Regarding claim 7, Minkin teaches [a]n apparatus according to claim I (as discussed above), wherein the protection unit includes

a cover which is pivotally attached by a hinge ("FIGS. 4B and 4 C show cover 9 as connected to photosensitive unit 3, for example, by a hinge 91 ...", Minkin, column 8, line 40) to a sensor window from which the detection surface is exposed ("to permit a user to place a finger onto the entry surface 5 for transillumination ..." Minkin, column 8, line 46).

Minkin teaches that one having ordinary skill in the art may implement variations on the cover ("Various modifications and adaptations may be made to the present invention by those skilled in the art that fall within the scope and spirit of the appended claims. For example, numerous variations with respect to the cover, ...", Minkin, Column 12, line 23.)

Minkin does not teach an opening/closing button which can switch between a closed state of the cover in order to cover the detection surface and an open state of the cover in order to expose the detection surface.

Lu, working in a similar problem solving area of the protection of optical surfaces does disclose an opening/closing button which can switch between a closed state of the cover in order to cover the detection surface and an open state of the cover in order to expose the detection surface ("before taking a picture, the user must turn on the camera

by pressing an open/close button to uncover the lens cap from the lens" Lu, paragraph 3).

It would have been reasonable for one skilled in the art to take inspiration from a digital camera lens cap and devise a cover for a fingerprint sensor that could be opened and closed via push buttons. It would have been obvious at the time the invention was made to one of ordinary skill in the art to combine the fingerprint analysis system of Minkin with the button controlled lens cap system of Lu in order to protect the cover from excessive force manually applied by the user ("a lens cover equipped with a lens cover mechanism which can easily open and close the lens cover while preventing an extra force from working on a lens barrel section ... ", Muroi, column 3, line 28). It also could provide for an improved aesthetic design where the cover has a less busy appearance since no protrusions or recesses are required as a user operable element. An automated cover also could have more customer appeal ("gee whiz factor").

Regarding claim 9, the Minkin-Muroi combination teaches all the elements of claim 8 as described above, and button control cover elements of claim 9 as described in claim 7 above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Warren et al. (US 6,304,666 B1) and Toru et al. (JP 2002-297305) both teach a sensor that can be used for both fingerprint and handwriting input. Warren further indicates a film may be placed over the sensor particularly for fingerprint sensing.

Hou (US 2002/0158837 A1) teaches a fingerprint sensor cover pivotally coupled to a housing with a release button.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Redding whose telephone number is (571) 270-1579. The examiner can normally be reached on Mon - Fri 7:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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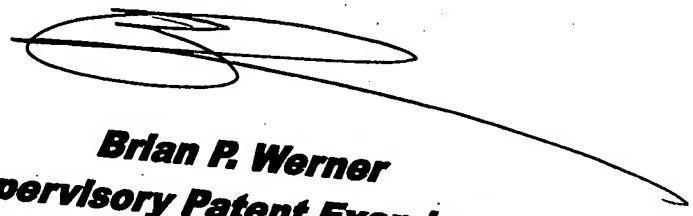

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